

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A rolling bearing apparatus comprising:

a roller bearing including

a plurality of rolling elements held between an inner ring and an outer ring by a retainer,

and

grease sealed in said rolling bearing by a seal;

a rotary body provided with said outer ring; and

a shaft provided with said inner ring,

wherein said rolling bearing apparatus is configured such that said rotary body and said shaft are connected together by a clutch mechanism,

when said rotary body and said shaft are connected, said rolling bearing can be used on receiving a rotation load, while the relative rotation between said inner and outer rings is zero,

and

wherein an initial radial clearance between said inner and outer rings is set such that a bearing effective clearance when said rolling bearing is incorporated between said rotary body and said shaft can provide a positive value; and

wherein the positive value of the radial clearance is set such that the contact position of the rolling element with respect to the raceway surface of the inner ring is gradually shifted when the relative rotation between inner and outer rings is zero.

2. (original): A rolling bearing as set forth in Claim 1, wherein said bearing effective clearance is set at 0.020 mm or more.

3. (previously presented): A rolling bearing as set forth in Claim 1, wherein the depths of grooves formed in said inner and outer rings are respectively 17% or more of the diameter of one of said rolling elements.

4. (previously presented): A rolling bearing as set forth in Claim 2, wherein the depths of grooves formed in said inner and outer rings are respectively 17% or more of the diameter of one of said rolling elements.

5. (previously presented): A rolling bearing as set forth in Claim 1, wherein an interference of a seal lip of said seal is 60% or more of an axial clearance.

6. (previously presented): A rolling bearing as set forth in Claim 2, wherein an interference of a seal lip of said seal is 60% or more of an axial clearance.

7. (previously presented): A rolling bearing as set forth in Claim 3, wherein an interference of a seal lip of said seal is 60% or more of an axial clearance.

8. (previously presented): A rolling bearing as set forth in Claim 4, wherein an interference of a seal lip of said seal is 60% or more of an axial clearance.

9. (previously presented): A rolling bearing as set forth in Claim 1, wherein the dynamic viscosity at 40° C of a base oil of said grease is 80 mm²/s or more.

10. (previously presented): A rolling bearing as set forth in Claim 2, wherein the dynamic viscosity at 40° C of a base oil of said grease is 80 mm²/s or more.

11. (previously presented): A rolling bearing as set forth in Claim 3, wherein the dynamic viscosity at 40° C of a base oil of said grease is 80 mm²/s or more.

12. (previously presented): A rolling bearing as set forth in Claim 4, wherein the dynamic viscosity at 40° C of a base oil of said grease is 80 mm²/s or more.

13. (previously presented): A rolling bearing as set forth in Claim 5, wherein the dynamic viscosity at 40° C of a base oil of said grease is 80 mm²/s or more.

14. (previously presented): A rolling bearing as set forth in Claim 6, wherein the dynamic viscosity at 40° C of a base oil of said grease is 80 mm²/s or more.

15. (previously presented): A rolling bearing as set forth in Claim 7, wherein the dynamic viscosity at 40° C of a base oil of said grease is 80 mm²/s or more.

16. (previously presented): A rolling bearing as set forth in Claim 8, wherein the dynamic viscosity at 40° C of a base oil of said grease is 80 mm²/s or more.

17. (canceled).

18. (currently amended): A rolling bearing apparatus as set forth in claim 1, comprising:
a roller bearing including
a plurality of rolling elements held between an inner ring and an outer ring by a retainer,
and
grease sealed in said rolling bearing by a seal;
a rotary body provided with said outer ring; and
a shaft provided with said inner ring,
wherein said rolling bearing apparatus is configured such that said rotary body and said
shaft are connected together by a clutch mechanism,
when said rotary body and said shaft are connected, said rolling bearing can be used on
receiving a rotation load, while the relative rotation between said inner and outer rings is zero,
wherein an initial radial clearance between said inner and outer rings is set such that a
bearing effective clearance when said rolling bearing is incorporated between said rotary body
and said shaft can provide a positive value; and

wherein the positive value of the radial clearance is set such that the contact position of the rolling element with respect to the raceway surface of the inner ring is shiftable in a circumferential direction when the relative rotation between inner and outer rings is zero.